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Total Number of Pages in This Submission

Application Number	10/728,932
Filing Date	December 8, 2003
First Named Inventor	Toshimitsu KONUMA
Group Art Unit	2871
Examiner Name	H. Ngo
Attorney Docket Number	0756-7221

ENCLOSURES *(check all that apply)*

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☒ Amendment / Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/ Incomplete Application
  - ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Assignment Papers *(for an Application)*
- ☐ Drawing(s)
- ☐ Declaration and Power of Attorney
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
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- ☐ Appeal Communication to Group *(Appeal Notice, Brief, Reply Brief)*
- ☐ Proprietary Information
- ☐ Status Letter
- ☐ Other Enclosures
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Remarks

☒ The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 50-2280 for the above identified docket number.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Eric J. Robinson, Reg. No. 38,285 Robinson Intellectual Property Law Office, P.C. PMB 955 21010 Southbank Street Potomac Falls, VA 20165
Signature	
Date	November 9, 2005

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Type or printed name	Eric Robinson		
Signature		Date	November 9, 2005

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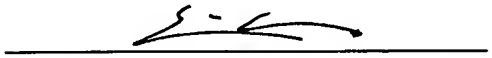
Attorney Docket No. 0756-7221

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	)	Group Art Unit: 2871
Toshimitsu KONUMA	)	Examiner: H. Ngo
Serial No. 10/728,932	)	CERTIFICATE OF MAILING
Filed: December 8, 2003	)	I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on November 9, 2005.
For: ELECTRO-OPTICAL DEVICE WITH LIQUID CRYSTAL	)	



RESPONSE

Honorable Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The Official Action mailed August 9, 2005, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on December 8, 2003, and January 21, 2005.

Claims 6-22 are pending in the present application, of which claims 6, 12 and 17 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 6-22 as obvious based on the combination of U.S. Patent No. 5,250,214 to Kanemoto et al. and U.S. Patent No. 5,214,523 to Nito et al. The Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Kanemoto and Nito or to combine reference teachings to achieve the claimed invention. MPEP § 2142 states that the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. It is respectfully submitted that the Official Action has failed to carry this burden. While the Official Action relies on various teachings of the cited prior art to disclose aspects of the claimed invention and asserts that these aspects could be modified in the manner asserted in the Official Action, it is submitted that the Official Action does not adequately set forth why one of skill in the art would combine the references to achieve the features of the present invention.

The test for obviousness is not whether the references "could have been" combined or modified as asserted in the Official Action, but rather whether the

references should have been. As noted in MPEP § 2143.01, "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) (emphasis in original). Thus, it is respectfully submitted that the standard set forth in the Official Action is improper to support a finding of *prima facie* obviousness.

Independent claims 1, 12 and 17, in pertinent part, recite a pair of orientation films provided adjacent to and between a pair of substrates respectively and having antiparallel orientation directions to each other, where spacing between said substrates is less than 3.5 μm. The Official Action concedes that Kanemoto does not teach "a display device having spacing between the substrates being less than 3.5 μm" (page 3, Paper No. 20050806). The Official Action relies on Nito to allegedly teach "forming a display device having spacing between the pair of substrates being less than 3.5 μm" (Id.). The Official Action further asserts that "Nito et al also teach (col. 10, lines 25-65) rubbing a pair of orientation films with antiparallel orientation directions to each other for orienting liquid crystal in a monostable state or cell. Doing so would further enhancing a device with application of high electrical field and assuring of sufficient light transmittance" (page 4, Id.). The Official Action asserts that "it would have been obvious for one having ordinary skill in the art to modify Kanemoto et al. display device with the space between the substrates being less than 3.5 μm for obtaining a monostability of the liquid crystal molecules in order to provide for application of a high electrical field and to assure sufficient light transmittance, as taught by Nito et al." (page 4, Id.). The Applicant respectfully disagrees and traverses the above assertions in the Official Action.

The Official Action appears to take the position that rubbing a pair of orientation films with antiparallel orientation directions to each other for orienting liquid crystal in a monostable state or cell relates to the features of a high electrical field and sufficient light transmittance. However, Nito does not teach or suggest such a relationship.

Rather, Nito appears to teach that "[in] order to provide for application of a high electrical field and to assure sufficient light transmittance, the cell gap in the range of 1.6 to 2.7 μm is preferred" (column 4, lines 15-18). As shown below, it would not have been obvious to one of ordinary skill in the art at the time of the present invention to apply the cell gap of Nito to Kanemoto.

It is noted that Nito is directed to a smectic C liquid crystal display (LCD) device. However, Kanemoto is generally directed to a nematic LCD device. The Official Action has not shown that the advantages of Nito's smectic C LCD could be combined with Kanemoto's nematic LCD. In fact, Kanemoto teaches that nematic LCDs require a cell gap between substrates on the order of 6.7 μm (see EXAMPLE 1 of Kanemoto; column 28, lines 3-4). The prior art does not teach or suggest that the features of a smectic C LCD could or should be applied to a nematic LCD. Therefore, Kanemoto and Nito, either alone or in combination, do not teach or suggest that a cell gap for Kanemoto's nematic LCD device should have been less than 3.5 μm.

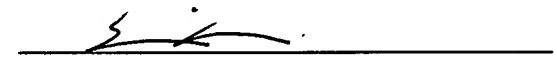
Therefore, the Applicant respectfully submits that the Official Action has not provided a proper suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Kanemoto and Nito or to combine reference teachings to achieve the claimed invention.

In the present application, it is respectfully submitted that the prior art of record, either alone or in combination, does not expressly or impliedly suggest the claimed invention and the Official Action has not presented a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

For the reasons stated above, the Official Action has not formed a proper *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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